

## A METHOD AND APPARATUS FOR REDUCTION OF DISTORTION IN A TRANSMITTER

### Abstract of the Disclosure

5 A transmitter that includes a feed forward amplifier amplifies an input signal to produce an amplified signal that includes a distortion component. The transmitter determines an error signal based on the input signal and the amplified signal and amplifies the error signal to produce an amplified error signal that includes an error signal distortion component. The transmitter combines the amplified error signal with the amplified signal to produce an output signal that includes the error signal distortion component and a portion of the amplified signal distortion component. The transmitter determines a distortion component of an attenuated version of the output signal and an energy of the determined distortion component. Based on the determined energy, the transmitter produces a control signal designed to minimize the energy of the distortion component of the attenuated output signal and thereby minimize distortion in the output signal.

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